

Peter Henry

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Objective

Seeking an information technology internship/co-op position to gain experience in applied computer science, system analysis/administration, or application development.

Education

California Institute of Technology, Pasadena, CA
Pursuing B.S. degree in Computer Science
Graduation in 2017

Technical Skills

Python	JavaScript	CentOS	Git	English
Java	PHP	Ubuntu	L ^A T _E X	French
SQL	IA32 / ARM7	Debian	Vim	MS Office
C/C++	Scheme	Windows	Mathematica	Adobe CS
HTML/CSS	Haskell	OSX	VirtualBox	

Projects

mosbasik.github.io/skillfarming. In development.

Single-page app that determines the realtime profitability of farming skillpoints in Eve Online
Simple project to become more familiar with Vue.js, a minimal JavaScript framework

whsales.peterhenry.net. Summer 2015.

Rewrite/update of existing website used by Eve Online players to publically post wormhole sale listings
Adds significantly more granular order sorting/searching capability and more accurate input validation
Interfaces with the Eve Online API and certain third-party crowdsourced datasets not distributed officially
Backend is Python/Django and SQLite3; frontend is HTML/CSS, Javascript/jQuery and Bootstrap

moviepicker.peterhenry.net/movies/. Summer 2015.

Webapp designed to answer the question “What should we watch tonight?”
Users select an arbitrarily large set of movies that they are personally interested in watching
Aggregates of users’ movie selections are used to figure out movies that arbitrary user groups want to watch
Interfaces with the IMDB dataset via the OmniDB API
Backend is Python/Django and SQLite3; front-end in HTML/CSS, Javascript/jQuery and Bootstrap

github.com/mosbasik/rvagaming. Summer 2012 to Summer 2014.

Website to track small group of gamers
Database of users, account handles and alternate accounts powered by Facebook and Steam public APIs
Database of all matches played by users powered by Python’s Beautiful Soup web scraping library
Static reference pages (client settings, common issues, console tweaks, game guides, and other content)
Back-end written in Python, PHP, and MySQL; front-end in HTML/CSS and JavaScript/jQuery

Work Experience

Belk Department Store Stocker (Temp through CornerStone Staffing). February 2016 through March 2016.

Process daily shipments and perform weekly inventories of stockroom and display counters
Plan women’s shoes stockroom layout for maximum stocking and retrieving efficiency
Retrieve/recommend footwear for customers, makes sales and operate point-of-sale computers

Tarrant County Poll Worker. November 2015.

Set up / dismantle Election Day equipment at local polling place
Assist voters with the voting process and ensure proper procedures are followed

Ricketts Information Management Systems & Services Representative. Summer 2013 to Summer 2015.

Configure, secure, and maintain CentOS server belonging to a Caltech undergraduate residence

Maintain house network, machines and printers

Provide computer/network assistance to house members

Ricketts Vice President. February 2014 to February 2015.

Housing assignments coordinator for a Caltech undergraduate residence

Liaison between administrative staff and undergraduates

House events and logistics manager (inventory, purchasing, cleanup)

IT Intern for The Seed Company. Summer 2012.

Migrate local/overseas email accounts and data to new MS Exchange server

Contact employees to schedule/maintain migration priority rosters

Document problems/unusual cases and write tutorials for company wiki (Mac/Unix migrations, etc)

Securely wipe and reconfigure used machines for resale

Media Team Member for Covenant Church Colleyville. Summer 2011 to present.

Maintain internally consistent and easily searchable persistent media database

Coordinate with presenters regarding new material they intend to show

Provide the audience with undistracting high-quality audio and visuals

Job Coordinator for Rift Valley Academy Class of '11 "Senior Store" Fundraising Program. 2010-2011.

Write and maintain database of eligible students by coordinating with class sponsors, coaches, and teachers

Track work histories to ensure reasonable hours and reassign under-performing workers to better fitting jobs

Generate and distribute assignment rosters to student managers and class sponsors

Enforce disciplinary measures where appropriate, and tracked offenses for future reference

Coursework/Miniprojects

CS/CNS/EE 156a and 156b - Learning Systems (Python, C++). 2014.

Work on the "Netflix Prize" machine learning problem

CS/EE 144 - The Ideas Behind Our Networked World (Python). 2013.

PageRank calculation of large graphs using Amazon Elastic MapReduce

CS 115 - Functional Programming (Haskell). 2012.

"Sudoku" solver

S-expression and XML parsers

CS 24 - Introduction to Computing Systems (C, IA32). 2012.

Explicit heap memory allocator/deallocator

Cache simulator, and cache-optimized matrix transpose function

System-level multithreading scheduler with timer interrupts for greedy threads

Virtual pagefile and memory system using a number of page replacement policies

Proof-of-concept virtual-kernel root exploit

CS 4 - Fundamentals of Computer Programming (Scheme/Racket). 2011.

Differential equation solver using higher-order functions

CS 2 - Introduction to Programming Methods (Java, Python, C++). 2011.

"Reversi" heuristic AI